

STATE OF SOUTH CAROLINA

(Caption of Case)

BEFORE THE
PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

COVER SHEET

DOCKET
NUMBER: 2006 - 224 - E

(Please type or print)

Submitted by: Len S. Anthony

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DOCKETING INFORMATION (Check all that apply)

☐ Emergency Relief demanded in petition

☐ Request for item to be placed on Commission's Agenda expeditiously

☒ Other: Report

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)			
<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Affidavit	<input type="checkbox"/> Letter	<input type="checkbox"/> Request	
<input type="checkbox"/> Electric/Gas	<input type="checkbox"/> Agreement	<input type="checkbox"/> Memorandum	<input type="checkbox"/> Request for Certification	
<input type="checkbox"/> Electric/Telecommunications	<input type="checkbox"/> Answer	<input type="checkbox"/> Motion	<input type="checkbox"/> Request for Investigation	
<input type="checkbox"/> Electric/Water	<input type="checkbox"/> Appellate Review	<input type="checkbox"/> Objection	<input type="checkbox"/> Resale Agreement	
<input type="checkbox"/> Electric/Water/Telecom.	<input type="checkbox"/> Application	<input type="checkbox"/> Petition	<input type="checkbox"/> Resale Amendment	
<input type="checkbox"/> Electric/Water/Sewer	<input type="checkbox"/> Brief	<input type="checkbox"/> Petition for Reconsideration	<input type="checkbox"/> Reservation Letter	
<input type="checkbox"/> Gas	<input type="checkbox"/> Certificate	<input type="checkbox"/> Petition for Rulemaking	<input type="checkbox"/> Response	
<input type="checkbox"/> Railroad	<input type="checkbox"/> Comments	<input type="checkbox"/> Petition for Rule to Show Cause	<input type="checkbox"/> Response to Discovery	
<input type="checkbox"/> Sewer	<input type="checkbox"/> Complaint	<input type="checkbox"/> Petition to Intervene	<input type="checkbox"/> Return to Petition	
<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Consent Order	<input type="checkbox"/> Petition to Intervene Out of Time	<input type="checkbox"/> Stipulation	
<input type="checkbox"/> Transportation	<input type="checkbox"/> Discovery	<input type="checkbox"/> Prefiled Testimony	<input type="checkbox"/> Subpoena	
<input type="checkbox"/> Water	<input type="checkbox"/> Exhibit	<input type="checkbox"/> Promotion	<input type="checkbox"/> Tariff	
<input type="checkbox"/> Water/Sewer	<input type="checkbox"/> Expedited Consideration	<input type="checkbox"/> Proposed Order	<input type="checkbox"/> Other: _____	
<input type="checkbox"/> Administrative Matter	<input type="checkbox"/> Interconnection Agreement	<input type="checkbox"/> Protest		
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Interconnection Amendment	<input type="checkbox"/> Publisher's Affidavit		
	<input type="checkbox"/> Late-Filed Exhibit	<input checked="" type="checkbox"/> Report		

Print Form

Reset Form



July 24, 2007

Charles L.A. Terreni
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report (June 2007)
Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed are an original and one copy of the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of June 2007.

Sincerely,

s/ Len S. Anthony

Len S. Anthony
Deputy General Counsel – Regulatory Affairs

LSA/dhs
Enclosures
45612

c: John Flitter (ORS)

June 2007

The following units had no off-line outages during the month of June:

Brunswick Unit 1
Brunswick Unit 2
Harris Unit 1
Robinson Unit 2
Mayo Unit 1
Roxboro Unit 2
Roxboro Unit 4

Roxboro Unit 3

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 23:23 on June 12, and returned to service at 1:00 on June 16, a duration of 73 hours and 37 minutes.
- B. Cause: 3A and 3B Air Heater Wash
- C. Explanation: The unit was taken out of service to inspect and wash the 3A and 3B air heaters.
- D. Corrective Action: Upon completion of the inspection and maintenance activities on the 3A and 3B air heaters, the unit was put in reserve shutdown.

Full Forced Outage

- A. Duration: The unit was taken out of service at 13:00 on June 17, and returned to service at 16:54 on June 17, a duration of 3 hours and 54 minutes.
- B. Cause: Circulating Water Pumps
- C. Explanation: Upon completion of the maintenance outage to wash the 3A and 3B air heaters, the unit was put into reserve shutdown. At the end of the reserve shutdown period, an attempt was made to start the unit and put it back into service. However, due to problems with circulating water pumps, the unit could not be started.
- D. Corrective Action: Repairs were made to correct the issues associated with the circulating water pumps, and the unit was returned to service.

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	938 MW		938 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	683,339 MWH		7,930,353 MWH		2
Capacity Factor	101.18 %		96.51 %		
Equivalent Availability	98.90 %		93.61 %		
Output Factor	101.18 %		101.55 %		
Heat Rate	10,384 BTU/KWH		10,325 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	4,726	0.70	34,562	0.42	4
Full Forced	0	0.00	407,202	4.96	5
Partial Forced	2,694	0.40	62,888	0.77	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	675,360		8,216,880		8

* See 'Notes for Nuclear Units' filed with the January 2007 report.

** Gross of Power Agency

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	937 MW		937 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	673,524 MWH		6,545,228 MWH		2
Capacity Factor	99.83 %		79.74 %		
Equivalent Availability	99.40 %		79.02 %		
Output Factor	99.83 %		98.26 %		
Heat Rate	10,593 BTU/KWH		10,577 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,040,570	12.68	3
Partial Scheduled	4,042	0.60	100,626	1.23	4
Full Forced	0	0.00	506,464	6.17	5
Partial Forced	0	0.00	61,435	0.75	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	674,640		8,208,120		8

* See 'Notes for Nuclear Units' filed with the January 2007 report.

** Gross of Power Agency

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	900 MW		900 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	648,431 MWH		7,961,805 MWH		2
Capacity Factor	100.07 %		100.99 %		
Equivalent Availability	100.00 %		99.21 %		
Output Factor	100.07 %		101.73 %		
Heat Rate	10,987 BTU/KWH		10,807 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	1,063	0.01	4
Full Forced	0	0.00	57,465	0.73	5
Partial Forced	0	0.00	11,732	0.15	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	648,000		7,884,000		8

* See 'Notes for Nuclear Units' filed with the January 2007 report.

** Gross of Power Agency

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	710 MW		710 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	525,429 MWH		5,703,843 MWH		2
Capacity Factor	102.78 %		91.71 %		
Equivalent Availability	99.98 %		88.11 %		
Output Factor	102.78 %		103.38 %		
Heat Rate	10,924 BTU/KWH		10,811 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	628,586	10.11	3
Partial Scheduled	0	0.00	16,784	0.27	4
Full Forced	0	0.00	73,508	1.18	5
Partial Forced	79	0.02	14,829	0.24	6
Economic Dispatch	0	0.00	9,775	0.16	7
Possible MWH	511,200		6,219,600		8

* See 'Notes for Nuclear Units' filed with the January 2007 report.

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	741 MW		743 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	420,574 MWH		4,482,604 MWH		2
Capacity Factor	78.83 %		69.06 %		
Equivalent Availability	99.96 %		90.57 %		
Output Factor	78.83 %		73.67 %		
Heat Rate	10,299 BTU/KWH		10,536 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	363,815	5.59	3
Partial Scheduled	0	0.00	81,290	1.25	4
Full Forced	0	0.00	42,745	0.66	5
Partial Forced	230	0.04	125,113	1.92	6
Economic Dispatch	112,716	21.13	1,413,262	21.71	7
Possible MWH	533,520		6,508,680		8

* See 'Notes for Fossil Units' filed with the January 2007 report.

** Gross of Power Agency

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	639 MW		655 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	420,047 MWH		4,267,282 MWH		2
Capacity Factor	91.30 %		74.43 %		
Equivalent Availability	99.78 %		85.13 %		
Output Factor	91.30 %		84.00 %		
Heat Rate	9,312 BTU/KWH		9,369 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	531,474	9.27	3
Partial Scheduled	0	0.00	270,021	4.71	4
Full Forced	0	0.00	24,708	0.43	5
Partial Forced	1,008	0.22	14,775	0.26	6
Economic Dispatch	39,025	8.48	630,506	11.00	7
Possible MWH	460,080		5,733,420		8

* See 'Notes for Fossil Units' filed with the January 2007 report.

	Month of June 2007		Twelve Month Summary		See Notes*
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MDC	705 MW		706 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	315,958 MWH		3,680,566 MWH		2
Capacity Factor	62.25 %		59.51 %		
Equivalent Availability	87.89 %		76.97 %		
Output Factor	73.90 %		73.97 %		
Heat Rate	11,610 BTU/KWH		10,773 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	51,900	10.22	1,083,867	17.53	3
Partial Scheduled	0	0.00	62,872	1.02	4
Full Forced	2,750	0.54	100,968	1.63	5
Partial Forced	6,808	1.34	177,672	2.87	6
Economic Dispatch	130,184	25.65	1,075,838	17.40	7
Possible MWH	507,600		6,184,560		8

* See 'Notes for Fossil Units' filed with the January 2007 report.

	Month of June 2007		Twelve Month Summary		See Notes*
MDC	698 MW		699 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	366,040 MWH		4,207,926 MWH		2
Capacity Factor	72.84 %		68.72 %		
Equivalent Availability	97.07 %		96.46 %		
Output Factor	72.84 %		69.33 %		
Heat Rate	10,515 BTU/KWH		10,549 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	39,728	0.65	3
Partial Scheduled	8,294	1.65	143,296	2.34	4
Full Forced	0	0.00	5,600	0.09	5
Partial Forced	6,456	1.28	28,127	0.46	6
Economic Dispatch	121,770	24.23	1,698,637	27.74	7
Possible MWH	502,560		6,123,240		8

* See 'Notes for Fossil Units' filed with the January 2007 report.

** Gross of Power Agency

Plant	Unit	Current MW Rating	January 2006 - December 2006	June 2007	January 2007 - June 2007
Asheville	1	197	72.44	64.34	49.32
Asheville	2	186	60.37	64.19	74.21
Cape Fear	5	144	72.32	78.71	77.57
Cape Fear	6	173	65.99	67.46	70.00
Lee	1	77	47.56	70.10	54.67
Lee	2	77	43.52	62.24	59.31
Lee	3	252	60.06	68.01	68.77
Mayo	1	741	67.04	78.83	68.28
Robinson	1	180	78.19	81.84	77.25
Roxboro	1	383	77.79	81.13	78.19
Roxboro	2	639	81.26	91.30	68.35
Roxboro	3	705	59.60	62.25	72.54
Roxboro	4	698	65.20	72.84	71.43
Sutton	1	97	44.30	52.85	56.91
Sutton	2	106	46.43	58.86	63.83
Sutton	3	403	54.54	37.72	45.40
Weatherspoon	1	49	36.15	20.33	52.09
Weatherspoon	2	49	37.40	47.91	53.59
Weatherspoon	3	79	50.52	66.02	67.04
Fossil System Total		5,235	65.25	70.17	67.45
Brunswick	1	938	87.51	101.18	98.95
Brunswick	2	937	89.68	99.83	73.78
Harris	1	900	89.16	100.07	102.09
Robinson Nuclear	2	710	103.59	102.78	80.83
Nuclear System Total		3,485	91.80	100.86	89.30
Total System		8,720	75.80	82.44	76.18

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of $\geq 92.5\%$ during the 12 month period under review. For the test period April 1, 2007 through June 30, 2007, actual period to date performance is summarized below:

Period to Date: April 1, 2007 to June 30, 2007

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period A = 6,433,208 MWH

B. Total number of hours during SCPSC test period B = 2,184 hours

C. Nuclear system MDC during SCPSC test period (see page 2) C = 3,485 MW

D. Reasonable nuclear system reductions (see page 2) D = 1,275,057 MWH

A. SC Fuel Case nuclear system capacity factor: $[(A + D) / (B + C)] * 100 = 101.3\%$

NOTE:

If Line Item E $> 92.5\%$, presumption of utility's minimum cost of operation.

If Line Item E $< 92.5\%$, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: April 1, 2007 to June 30, 2007

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	937 MW	900 MW	710 MW	3,485 MW
Reasonable refueling outage time (MWH)	0	392,521	0	628,587	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	132,525	4,810	0	34,707	
Reasonable coast down power reductions (MWH)	0	0	0	6,195	
Reasonable power ascension power reductions (MWH)	20,463	27,100	0	22,063	
Prudent NRC required testing outages (MWH)	2,232	3,775	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	79	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	155,220	428,206	0	691,631	
Total reasonable outage time exclusions [carry to Page 1, Line D]					1,275,057